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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/799,989   | 03/12/2004  | Oscar Kipersztok     | 7784-000497COA      | 8786             |
| 27572  | 7590        | 08/25/2006           | EXAMINER            |                  |
| HARNESS, DICKEY & PIERCE, P.L.C.<br>P.O. BOX 828<br>BLOOMFIELD HILLS, MI 48303 |             |                      | TO, TUAN C          |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3663                |                  |

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/799,989             | KIPERSZTOK ET AL.   |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Tuan C. To             | 3663                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-15 and 26-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 14, 15 and 26-39 is/are allowed.
- 6) ☒ Claim(s) 3-6 and 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

After carefully studying the cited prior art to Felke et al., the examiner has found Felke et al. reads on the limitations of claim 9. Therefore, the indicated allowability of claim 9 is withdrawn.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 4-6, 8, 9-13 are rejected under 35 U.S.C. 102 (e) as being anticipated by Felke et al. (US 20040034456A1).

With respect to claim 9, Felke et al. disclose a system/method for improving fault isolation, in which multistage decision is made via capturing a set of symptoms and identifying a set of repairs consistent with the set of symptoms. In Felke et al., at least one of average cost for repairing and historical component is defined as an variable associated with the repairs when a set of repairs are identified (Felke et al., page 1, paragraph 0007). It should be noted that the system/method as disclosed in Felke et al. is applied in aircraft maintenance.

Felke et al. teach that the system/method for improving fault isolation includes a user interface (105) for downloading failure mode or condition relevant data such as observed symptoms or test result (see page 3, paragraph 0019, lines 9-13).

Felke et al. further discloses the following: "system information relating to components of the mobile platform" (Felke et al, abstract; page 1, paragraph 0007).

As clearly represented in Felke et al., a maintenance action is automatically provided, for example, a set of repairs are identified to be consistent with a set of observed symptoms (Felke et al. abstract).

Felke et al. further teachings the act of receiving an input that relates to a remedial action with respect to at least one suspect component and determining the maintenance action in light of the remedial action. For example, the a test can be selected as an input remedial action in response to symptom of a failed component. Then a maintenance action is taken in response to the result of the test (see Felke et al., paragraph 008).

With regard to claim 4, as discussed herein above, Felke et al. show that the maintenance action is automatically provided, for example, a set of repairs are provided as being consistent with a set of observed symptoms (Felke et al. abstract).

With regard to claim 5, Felke et al. disclose one or more tests and remedial actions for the aircraft over multiple stage in accordance with the observed symptoms and also the cost of repairing (Felke et al., abstract).

With regard to claim 6, Felke et al. teach that the maintenance action includes repairing a suspect component (Felke et al., column 3, page 23).

With regard to claim 8, Felke et al. further disclose the following: "receiving at least one input relating to an outcome of a test, and re-determining the maintenance action in light of the outcome of the test (Felke et al., page 4, paragraph 25, lines 1-12).

With regard to claim 10, as represented herein above, Felke et al. directs to repair cost or historical component is identified as one or more variable associated with preflight dispatch.

With regard to claim 11, Felke et al. teach the repair cost as one of the variables of the extended diagnostic model (see abstract).

With regard to claims 12 and 13, Felke et al. discloses a repair decision interleaved with the test decision (see Felke et al., abstract), wherein the repair decision includes repairing a suspect component.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Felke et al. (US 20040034456A1) and in view of Sampath et al. (US 6892317B1).

Felke et al. addresses the limitations of claim 2 except for "the construction of the entropy-based VOI diagnostic model and the extended VOI diagnostic model are based upon a Bayesian network".

Sampath et al. directs to a system/method for predicting failure in a network environment including the teachings of the construction of the VOI diagnostic model and the extended VOI diagnostic model are based upon a Bayesian network (Sampath et al., column 6, lines 36 and 37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Felke et al. to include the teachings of Sampath et al. so that a diagnostic server, which communicates with a plurality of electronic systems in a network, can send an appropriate action to the electronic systems in response to the diagnostic information received from such electronic systems.

***Allowable Subject Matter***

Claims 7, 14, 15, and 26-39 are still set in a condition of allowance.

**Conclusions**

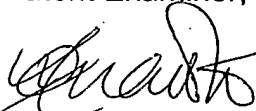
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (571) 272-6985. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner,



Tuan C To

August 14, 2006